

SECTION 4

Avoidance Alternatives

The locations of known and potential 4(f) properties were identified early in the project alternatives development process. This early identification allowed the development of alternatives that avoided recreational and historical resources wherever possible. (For a detailed description of the build and no-build alternatives and their development process, see Section 2 of the DEIS.)

During the course of developing and screening alternatives, a total of 20 properties within the I-74 study corridor were identified as 4(f) properties. Five additional properties were studied, but were determined not to be eligible for the National Register. Alternative development efforts have considered all of these properties and have sought to avoid as many as possible. Based on the principle elements of the purpose and need for this project, it is not possible to avoid every 4(f) property with the range of reasonable and representative alternatives carried forward during project development, including alternatives outside of the I-74 corridor. Therefore, no single avoidance alternative can avoid all 4(f) sites within this project corridor.

However, by identifying the location of known and potential 4(f) properties, it is possible to develop alternatives that avoid many of those 4(f) properties. Alternatives C, E, and F represent the least use of potential 4(f) properties and other sensitive resources in the corridor. See Section 1.3 of this 4(f) statement and Section 2 of the DEIS. For 4(f) properties that cannot be avoided by alternatives C, E, or F, site-specific avoidance alternatives have been considered and are discussed in Section 4.4 of this 4(f) Statement. The following sections will describe and analyze the range of the four basic sets of avoidance alternatives that have been considered:

- No-Action,
- Alternatives retaining the I-74 bridges and roadway in their present forms,
- Build alternatives, and
- Modifications to the build alternatives.

4.1 The No-Action Alternative

The No-Action Alternative is defined as no new major construction along the I-74 corridor. Improvements implemented with the No-Action Alternative would be limited to short-term restoration activities (maintenance improvements) needed to ensure continued bridge and roadway pavement integrity. The design of the existing roadway, including its location, geometric features, and current capacity constraints would remain unchanged. Under this alternative, some minor operational improvements could be anticipated, such as deployment of a traffic management system for the I-74 Mississippi River bridges, and minor improvements at high volume ramp intersections.

Under the No-Action Alternative, it is assumed that committed and planned improvements (as detailed in Iowa DOT and Illinois DOT multiyear programs and in the 2025 RTP) would still be undertaken.

Under this alternative, none of the 4(f) properties would be impacted; however, this alternative does not meet the purpose and need. This alternative is being carried forward as a comparison to the build alternatives where impacts to 4(f) properties occur.

4.2 Alternatives to Retain the I-74 Bridges and Roadway in Their Present Form

The following broad range of alternatives have been considered for their potential to avoid impacts to the Section 4(f) resources in the I-74 corridor by retaining the I-74 bridges and roadway in their present form. By doing so, they avoid potential impacts to all 4(f) resources within the project area.

- Diversion of I-74 traffic to other area interstate facilities;
- Diversion of I-74 traffic to the local road system to accommodate traffic with local destinations; and
- Transit and transportation system management strategies.

These alternatives are discussed in further detail below:

4.2.1 Diversion of I-74 Traffic to Other Area Interstate Facilities by Revising Interstate Signing

Over 95 percent of the traffic on the Mississippi River bridges have either an origin or a destination in the study area. Therefore, given this high percentage of local traffic and the distance to other interstate facilities (approximately 7 miles and 8 miles to I-280 and I-80, respectively), only a small portion of the existing traffic (less than 5 percent) would be diverted to adjacent interstate routes. Motorists that remain on I-74 would continue to experience congested conditions, safety issues, and poor travel dependability. Additionally, this alternative would not provide improved transportation connections and would not provide economic sustainability in the project corridor. This alternative would not meet the project purpose and need because it would not improve capacity, travel reliability, or safety along I-74 in the study area. Therefore, this alternative is not recommended for further detailed study.

4.2.2 Diversion of I-74 Traffic to the Local Road System

Diverting traffic to local routes is not a practical solution given the high volume of river crossing traffic along I-74, regional travel patterns, and the lack of viable alternative local road river crossings. Presently, local roadway crossings of the Mississippi River are provided at the Arsenal Bridge (approximately three river miles west of I-74) and at the Centennial Bridge (approximately four river miles west of I-74). Long-range plans also call for construction of a new local road river crossing between Bettendorf and East Moline (Bettendorf-East Moline Bridge, approximately 3 miles east of I-74). Diversion of interstate traffic to adjacent existing or planned local roadway crossings is not viable due to design

and capacity constraints on these river crossing bridges and local roadways, as well as the indirect travel routes that motorists would be required to take. Projected year 2025 traffic along I-74, which accounts for the removal of tolls from the Centennial Bridge in May 2003 and assumes construction of a new Bettendorf-East Moline Bridge, has an Average Daily Traffic Count of 78,000 vehicles.

This alternative would not meet the purpose and need for the project. It would neither improve capacity or safety along the corridor, nor would it improve the dependability of travel. Therefore, this alternative is not recommended for further detailed study.

4.2.3 Transit and Transportation System Management Strategies

Transit services in the Quad Cities are currently provided by Bettendorf Transit, the City of Davenport CitiBus, and MetroLINK. Ridership on the region's transit system totaled over 3.7 million riders in 1999. Projected ridership is estimated to reach over 7.8 million riders by 2025, at an increase of 2.9 percent compounded annually. With the expected growth in ridership, the *2025 Quad City Area Long Range Transportation Plan* (March 2001) identified maintaining the current level of service as the transit system's top priority. At the same time that the transit ridership is expected to more than double on all three facilities, vehicle trips across the Mississippi River in the Quad Cities are forecast to increase from 150,300 (1999 ADT) to 223,000 (2025 ADT) (*2025 Quad City Area Long Range Transportation Plan*, March 2001).

Improving transit facilities has not been carried forward for further consideration as a stand-alone alternative because it does not address the need to increase the capacity along I-74 or improve safety, operational, or infrastructure conditions. However, transit considerations will be included with proposed roadway alternatives, with the objective of accommodating planned transit services and enhancing modal connections.

Several TSM strategies have been investigated in prior regional studies. The TSM applications recommended were freeway and incident management systems, traveler information systems, traffic signal systems, and transit system enhancements. Although the TSM applications would improve the efficiency of the existing transportation system, they would not correct the safety, capacity, and condition deficiencies of the I-74 corridor. The TSM applications noted above should be included as an element of the alternatives to be considered; however, as they would not measurably correct the safety, capacity, and condition deficiencies along I-74, they do not in and of themselves meet the purpose and need.

4.3 Build Alternatives - River Crossing Location Options

Alternative improvements were considered for the I-74 mainline and six service interchanges between 23rd Avenue in Moline, Illinois (south project terminus) and 53rd Street in Davenport, Iowa (north project terminus), a distance of 7.4 miles. In the vicinity of the Mississippi River, the project corridor boundary extended approximately 1600 feet to the east and west of the existing I-74 corridor. This boundary allowed consideration of a broad range of location options for an improved I-74 river crossing. The project corridor boundaries are shown in Appendix 4(f)-1.

A diverse array of alternatives were developed to address identified design, traffic and safety needs in the corridor, to meet established planning and design criteria and standards, to avoid or minimize impacts to the environmental resources, and to sustain economic development opportunities along the I-74 corridor. Given the differing nature of improvement requirements through the corridor, the study area was divided into three separate analysis sections; the South Section (from 23rd Avenue to 12th Avenue), the Central Section (from 12th Avenue in Illinois to Lincoln Road in Iowa), and the North Section (from Lincoln Road to north of 53rd Street). Early identification of environmental and community constraints was used to develop location alternatives that would avoid or minimize environmental impacts. The Mississippi River Crossing Area segment is being emphasized in this section as it includes the area of impacts for this Section 4(f) Statement.

Location options were explored within a corridor extending from 12th Street (Bettendorf)/18th Street (Moline), which are streets that coincide with the Arsenal Island study boundary on the west and approximately 1600 feet to the east, which is near the Isle of Capri Casino. Given the highly developed urban nature of the area, a broader study area was not deemed reasonable. Tolerances for easterly and westerly alignment shifts were then tested by developing possible general alignment options and evaluating their potential environmental and community impacts. Alignment options that addressed the purpose and need, met the engineering requirements and had the least amount of impact to environmental and socio-economic resources in the project corridor were carried forward with the build alternatives.

A total of ten Mississippi River crossing location options east and west of the existing river crossing were identified and considered (Alignment Options A through J). These ten alignment options are represented by the alignment alternatives C, E, and F. These alignments were revised to refine the design features and minimize the community impacts of the original alignments and carried forward as the best representatives of the original ten alignments. Alignment C is representative of other westerly alignment options (i.e. A and B) and was revised to minimize environmental, community, and 4(f) impacts.

As noted here and discussed in Section 2 of the DEIS, a thorough alternatives development process was undertaken. The alternatives were developed considering a range of constraints including the identification of potential 4(f) properties as well as the City of Moline Water Treatment Plant, Our Lady of Lourdes Church, Island of the Capri Casino, John Deere Building Plow Works Company Warehouse and Office Building, Montgomery Elevator Company and Moline Tool Company Erecting Shop (Kone, Inc.), and the planned redevelopment areas for Moline and Bettendorf. Also, parks, wetlands, potentially contaminated sites and additional community resources were considered in the development process.

Alignment Alternatives C, E, and F are briefly evaluated below. The maps in Appendix 4(f)-1 show the three build alternatives designated as the three “bands” with boundaries from 12th Avenue in Moline northerly to near Lincoln Road in Bettendorf. In addition to the three alternative bands, the maps show important sites, as noted above, in the project corridor that were considered in developing the C, E, and F Alignment Alternatives. For the discussion below, the river crossing alignment alternatives will be referred to as alternatives or alternative alignments.

4.3.1 Alternative Alignment C

Alternative C represents the minimum practical westerly alignment shift and was developed to minimize impacts to resources, major developments, and features west of I-74 (existing bluffs south of 7th Avenue, Scottish Rite Cathedral, LeClaire Hotel, Moline Water Treatment Plant, Deere & Co. offices and computer center, Leach Park, McManus Park, and multiple residential properties). Revised Alternative C was determined to be unreasonable following a more detailed evaluation of construction staging requirements and environmental and socioeconomic issues. Specifically, in order to minimize impacts, Alternative C would cross existing I-74 at two locations on the Illinois approach.

An analysis of construction staging requirements revealed that it would not be practical to construct Alternative C while maintaining traffic along I-74 both due to the elevation difference between existing and proposed profiles and close proximity to the existing structure. As discussed in the *Purpose and Need* section of the DEIS (Section 1), maintenance of traffic during construction is critical to the economic stability of the downtown areas, as approximately 70 percent of traffic on this section of I-74 is destined for one of the two downtown areas.

Further, Alternative C has greater potential environmental and socioeconomic impacts than alignments alternatives E or F, including greater potential impacts to 4(f) properties and Section 106 properties; both the LeClaire Hotel and Leach Park would be impacted by Alternative C but not E or F. Alternative C is representative of the other westerly alignments with regard to land impacts. The I-74 Project Advisory Committee and federal/state regulatory and resource agencies reviewed this recommendation and were in agreement that Alternative C and any westerly alignment shifts should be eliminated as they are unreasonable. However, Alternative C will be evaluated as an avoidance alternative for Alternatives E and F in the Section 4(f) discussion.

In addition to the avoidance of numerous 4(f) properties, Alignment Alternatives E and F would also improve the horizontal and vertical alignment of I-74 to meet roadway criteria and to facilitate construction staging in order to meet purpose and need. The design criteria for each build alternative is described as follows:

4.3.2 Alternative Alignment E

Alternative E maintains the series of reverse horizontal curves on the Illinois approach to the Mississippi River, but reduces the sharpness of the curves and shifts the new river crossing approximately 230 ft to the east of the existing bridges. By increasing the horizontal radius (which produces a wider, less dramatic curve) and the tangent distance between the successive curves (increases the length of straight road between the curves so one curve is not immediately followed by the other), the curve is smoother to the driver. The proposed alignment diverges from existing I-74 near 7th Avenue, proceeds in a northerly direction across the Mississippi River on a course parallel to and offset approximately 230 ft to the east of the existing bridges. It would connect with the existing centerline in the vicinity of Kimberly Road in Iowa.

4.3.3 Alternative Alignment F

Alternative F eliminates the reverse curves between 7th Avenue and the Mississippi River on the Illinois approach. The proposed alignment diverges from existing I-74 in the vicinity of 7th Avenue and proceeds in a northeasterly direction on tangent alignment across the Mississippi River. This results in an easterly alignment shift of up to approximately 780 ft from existing centerline. The proposed alignment meets the existing centerline in the vicinity of Kimberly Road in Iowa.

4.4 Modifications to the Mainline Build Alternatives/Site-Specific Avoidance Alternatives

This section discusses the avoidance options that were considered during project development for the specific 4(f) properties impacted. Avoidance alternatives were considered for each property potentially impacted. The maps in Appendix 4(f)-1 depict the constraints that were considered during alternative development. These maps should be referenced in addition to the site-specific maps found in Appendix 4(f)-2 for a visual understanding of the avoidance alternative discussion. The majority of the avoidance alternatives discussion focuses on shifts in the I-74 mainline. Where interchange variations made a difference in whether a property could be avoided, they are discussed.

In some cases, the avoidance options were determined to be unreasonable, either due to performance or their inability to meet the purpose and need. In other cases, the avoidance alternatives may have been retained for further consideration. As discussed previously in this section, Alternative C and the No-Action alternative were both considered as avoidance alternatives but neither meet the purpose and need. They are, however, used for comparing avoidance options for the specific 4(f) properties. Alternative C represents the westerly alignments, but has the fewest impacts when compared with the other possible westerly alignments. The following discussion considers westerly alignment shifts in the mainline, including Alternative C. More information about the alternatives can be found in Section 2 of the DEIS.

4.4.1 Scottish Rite Cathedral

Impacts to the southeast portion of the Scottish Rite Cathedral property would be caused by the redesign of the southbound I-74 entrance ramp at 19th Street. The impact could be avoided if access were not provided to I-74 in this location; however, this avoidance option would eliminate a current point of access to the interstate. It is not viable to remove this access from downtown Moline.

It may be possible to avoid impact to the property if the entrance ramp were not relocated to 19th Street; however, keeping the entrance ramp at 7th Avenue does not meet the purpose and need because of capacity and safety considerations. Serving as a north-south connector through Moline, 19th Street carries a significant volume of traffic destined for I-74. Presently, 19th Street traffic destined for I-74 must make a left turn (at the 19th Street/7th Avenue intersection) and then a right turn (at the 7th Avenue/I-74 intersection). By relocating the ramp connection to 19th Street, left turn volumes at the 19th Street/7th

Avenue intersection would be reduced (from a projected volume of 560 Design Hourly Volume (DHV) to 280 DHV), resulting in operational improvements and increased safety.

Further, if the ramp would not be relocated to 19th Street, there would still be a need to improve 7th Avenue to accommodate projected traffic demand, including the heavily-traveled SB to EB left turn movement. These improvements could still impact the Scottish Rite Cathedral property in the SW quadrant of the intersection.

Because it is the ramp that impacts the property, choosing Alternative C would not change the impact of either E or F. A westerly shift in the mainline would actually increase the impact to the property because the topography in the area would require considerably more grading. This would require the acquisition of more land from the 4(f) property at minimum and possibly even an impact to the building in order to shift the mainline from its existing location. A shift in the mainline to the east would cause impacts to another 4(f) property – the Thomas/Lewis/Wilson House, the First Congregational Church, and 0.09 acre of wetland as well additional residential and commercial properties. See Page 1 in Appendix 4(f)-1.

4.4.2 C. I. Josephson House

Impacts to the C. I. Josephson House are not dependent on the mainline alignment that is chosen – either E or F. Instead, the impacts are dependent on the interchange variation. In downtown Moline there are two interchange variations under consideration:

- **Variation M1 (split diamond type)** provides an improved full access interchange with ramp connections at 7th Avenue/19th Street and at 6th Avenue (IL 92 EB), as well as an improved half diamond type partial interchange at River Drive.
- **Variation M2 (loop type)** provides an improved full access interchange with ramp connections at 7th Avenue/19th Street, at 6th Avenue (IL 92 EB), and at 4th Avenue (IL 92 WB), as well as an improved half diamond type partial interchange at River Drive.

This property would be avoided if interchange variation M1 were chosen with either alignment E or F (See Page 2 of Appendix 4(f)-2). Traffic analyses reveal that both interchange variations would operate at an acceptable level of service and would provide improved connections to IL 92. Interchange variation M1 provides improved access to the downtown area of Moline, improves the interchange geometry, ramp storage capacity, and traffic demand and service, all elements of the purpose and need. However, variation M2 provides optimal direct connections between I-74 and the existing IL 92 one-way couple system. For a depiction of these variations, see Pages 3-4 and 8-9 in Appendix B of the DEIS.

As M1 interchange variation meets the purpose and need, it is being carried forward as an avoidance alternative.

4.4.3 Knights of Pythias Lodge Hall

Shifting the mainline to the west or east to avoid the Knights of Pythias Lodge Hall was considered, as Alternatives C, E, and F all impact the property. Moving the mainline to the west would encroach on several properties, including up to 6 additional 4(f) properties – the 1910 and 1935 Post Offices, The LeClaire Hotel, the George Benson House, the B.P.O.E (Elks Building), and the Scottish Rite Cathedral. The LeClaire Hotel has actually been listed on the National Register. The shift would also cause impacts to the John Deere Building and the

Moline Treatment Plant and up to approximately 20 commercial structures. The John Deere Building is actually a corporate campus consisting of the original building built in 1928 as well as a seven-story modern office building, 400 seat auditorium, and exhibition hall (Phase 1 cultural resource study, Quad Cities online webpage, last updated 2003). The Moline Treatment Plant, which treats approximately 2 billion gallons of water a year, is undergoing renovation at approximately 22 million dollars (City of Moline website, last updated 4/4/02). The costs to encroach on these sites is of such a magnitude that encroachment is not prudent. A westerly shift would also encroach on the two lanes of traffic on the existing alignment that are required to remain open to traffic while construction of the new bridge structure is occurring, and would therefore not meet the purpose and need.

Shifting the mainline to the east to avoid the Knights of Pythias building would increase the existing reverse curvature of the mainline/interchange alternative rather than lessen it. Removing or flattening the existing reverse curves and improving the roadway geometry is necessary to improve safety and operational characteristics of I-74, which is part of the purpose and need for the project. Therefore, shifting the mainline alignment to the east, while avoiding the property, would not meet the purpose and need. The easterly shift, depending on the distance of the shift, could impact up to approximately 20 properties, the Thomas Lewis Wilson House (a 4(f) property), and 0.09 acre of Palustrine Forested/Unconsolidated Bottoms Wetland.

4.4.4 Eagle Signal Building

Impacts to the Eagle Signal Building would be avoided by Alignment F with either interchange variation M1 or M2. Variation M1 is a split diamond type interchange while variation M2 is a loop-type interchange. Alignment F is farther east of existing I-74 than Alignment E. (See Pages 8 and 9 in Appendix B of the DEIS for a depiction of these interchanges and alignment locations).

Alignment F and the two interchange variations meet the purpose and need by improving the reverse curves and approach geometry, providing increased capacity, and improving access to the downtown Moline area. Therefore, they are being carried forward. This is the only property protected by 4(f) that is not impacted by both the E and F alignment alternatives. Typically, this condition alone would be sufficient to determine that there is a feasible and prudent avoidance alternative to the use of the property. However, when considering the global impacts of both of the alignments, there is the possibility for Alignment F to have considerably larger social and economic impacts to the local area. These impacts could be large enough in magnitude that Alignment F would be determined not prudent. Comments will be solicited through the public availability of the DEIS / Draft Section 4(f) Statement and the public hearing. After the comments are received, the use of this property will be analyzed along with all the global impacts for the two alignment alternatives to determine whether there is a feasible and prudent alternative to the use of this property.

4.4.5 Davenport, Rock Island and Northwestern Railroad Depot

Impact to the Davenport, Rock Island and Northwestern Railroad Depot building would be avoided if Alignment C were chosen. A portion of the west side of the property may, however, be required for ramp construction. Alignment C was determined to be

unreasonable, however, as it would not allow the maintenance of two lanes of traffic in each direction during construction and, therefore, would not meet the purpose and need. Shifting the mainline further west of C would impact up to 6 additional 4(f) properties – the 1910 and 1935 Post Offices, The LeClaire Hotel, the George Benson House, the B.P.O.E (Elks Building), and the Scottish Rite Cathedral as well as the John Deere Building, the Moline Treatment Plant and up to approximately 20 commercial structures, depending on the distance of the shift. As described above, under the Knights of Pythias Lodge discussion, it is not prudent to impact these buildings. Further, the LeClaire Hotel is the only property that is actually listed on the National Register of Historic Places.

Shifting the mainline further east than Alternative E or F, which would impact the property, would cause more commercial and some residential impacts. A range of between approximately five to twenty or thirty commercial buildings and residential buildings could be impacted, depending on the distance of the easterly shift from the mainline. Additionally, the area of impact could include the riverfront that is to be developed under the Moline Downtown Development Plan.

Further, shifting the mainline in either direction would not correct the reverse curves that the proposed alignments are designed to address. A westerly shift would emphasize the reverse curves, while a shift east of Alternative F would introduce new reverse curves. By maintaining or creating the reverse curves, these shifts would not meet the safety or operational characteristics as discussed in the purpose and need.

4.4.6 Iowa-Illinois Memorial Bridge

The Iowa-Illinois Memorial Bridge would be avoided if the No Action or non-roadway improvement alternatives discussed earlier in this section were chosen. Non-roadway improvement alternatives include diversion of I-74 traffic to other area interstate facilities, diversion of I-74 traffic to the local road system to accommodate traffic with local destinations, and transit and transportation system management strategies. As discussed in Section 4.2 of this 4(f) document, however, these alternatives would not meet the project purpose and need.

4.4.7 Iowana Milk Farms Company

The Iowana Milk Farms Company would be impacted by both alignments E and F with all interchange variations. Alternative C mainline avoids the property, but depending on the interchange variation that is chosen, the property may still be impacted. As this alignment was determined to not meet the purpose and need, the interchange variations will not be discussed in detail. Alternative C would impact Leach Park, a 4(f) property. Shifting farther west of C also has a direct impact of McManus Park (a 4(f) property) and the surrounding neighborhood, up to approximately 20 to 30 homes, as well as commercial structures and up to six potentially contaminated sites.

Alignments that are located to the east of the Iowana Milk Farms Company building would create a reverse curve along the alignment, which would compromise safety and traffic operations, and would therefore not meet the purpose and need. These alignments would also impact up to 14 additional contaminated sites, the Our Lady of Lourdes church, Bettendorf City Hall, Thomas Edison School, and two 4(f) properties – the Bettendorf

Grocery/Improvement Co. Building/W.F. Bruhn & Son General Merchandise Store and the Regina Coeli Monastery, which has been listed on the National Register (See Appendix 4(f)-1 and 4(f)-2).

Impacts to the property might be avoided if the US 67 interchange, which currently provides access to Grant and State Streets, is eliminated. Eliminating the US 67 interchange would not be consistent with local land use planning, which includes the goal of improving access to the downtown area for economic stability. Additionally, as both the E and F mainline alignments reconnect to existing I-74 near this location, the building may be impacted by construction of the mainline itself, due to the close proximity of the Iowana Milk Farms Company to existing I-74. Therefore, eliminating the interchange may not necessarily avoid the impact.

4.4.8 McManus Park

In response to public concerns regarding how roadway closures under I-74 would affect accessibility in downtown Bettendorf, two local roadway underpass variations (Kimberly Road Connector underpass or Holmes Street/Mississippi Boulevard underpass) were developed and evaluated. Both underpass variations are compatible with either alignment alternative E or F and with the diamond type interchange at US 67. However, the Holmes Street/Mississippi Boulevard underpass could not be provided with the single loop type interchange at US 67. The Holmes Street/Mississippi Boulevard has the potential to impact McManus Park, while the Kimberly Road Underpass would avoid it. The underpass options are summarized below.

- **Kimberly Road Underpass.** The Kimberly Road Underpass variation would maintain the existing Kimberly Road Connector underpass at I-74 and eliminate vehicular access under I-74 at Holmes Street/Mississippi Boulevard. Access for bicyclists and pedestrians under I-74 could be provided in the vicinity of Holmes Street/Mississippi Boulevard to optimize accessibility between neighborhood areas east and west of I-74.
- **Holmes Street/Mississippi Boulevard Underpass.** The Holmes Street/Mississippi Boulevard Underpass variation eliminates the existing Kimberly Road Connector underpass at I-74, and instead provides an underpass at Holmes Street/Mississippi Boulevard. Holmes Street/Mississippi Boulevard would need to be reconstructed and lowered by as much as 6 ft between 13th Street and 14th Street to provide adequate vertical clearance under the proposed I-74 ramps at Grant Street. This would require a substantial amount of excavation, reconstruction of portions of the existing storm sewer system, and construction of retaining walls along the north and south sides of Holmes Street/Mississippi Boulevard. The proposed Holmes Street/Mississippi Boulevard underpass would require the acquisition of approximately 0.07 ac of additional right-of-way and temporary construction easements.

Traffic analyses reveal that the Kimberly Road underpass maintains a reasonable connection between neighborhoods east and west of I-74. However, it requires minor out-of-direction travel and would result in a nominal increase in traffic volumes along US 67. The Holmes Street/Mississippi Boulevard underpass would require more substantial reconstruction along the local roadway system when compared to the Kimberly Road underpass and would result in additional right-of-way impacts. However, the Holmes Street/Mississippi

Boulevard underpass provides a more direct connection between neighborhoods, resulting in less out-of-direction travel and less diversion of neighborhood traffic to US 67. For a depiction of these variations, see Pages 13-16 in Appendix B of the DEIS and Pages 7 and 8 in Appendix 4(f)-2.

Impacts to McManus Park would be avoided if the Kimberly Road underpass variation were selected. The Kimberly Road underpass variation is being carried forward for further consideration.

4.5 Summary

Section 4(f) properties were identified early in the project development process. By identifying these properties early, avoidance of 4(f) properties was considered in the alternatives development process. Of the 20 4(f) properties within the I-74 corridor, twelve properties are avoided by the proposed alternatives. In addition to the proposed alternatives, which were developed to avoid as many impacts as possible while still meeting the purpose and need, the following alternatives were also considered for their potential to avoid 4(f) resources:

- No-Action,
- Diversion of traffic to other interstate facilities by revising interstate signing,
- Diversion of traffic to the local road system,
- Transit and transportation system management strategies, and
- Alternative river crossing location options

Although these alternatives would potentially avoid impacts to 4(f) properties within the I-74 corridor, these alternatives were not carried forward for detailed evaluation due to their inability to meet the project purpose and need.

For each of the eight potentially impacted properties, a series of specific avoidance alternatives were then investigated. These alternatives are summarized in Table 5, *Summary of Avoidance Alternatives for Specific Properties*.

Of the avoidance alternatives investigated for specific 4(f) properties, three were carried forward for further consideration. Those that were not carried forward were typically not able to meet the purpose and need or were not technically viable.

For the locations where impact was not avoidable, considerations for minimizing the impacts were developed. These measures to minimize harm are discussed in the following section.

TABLE 5
Summary of Avoidance Alternatives for Specific Properties

Property	Avoidance Alternative(s)	Avoidance Alternative Carried Forward?
Scottish Rite Cathedral	Do not provide access to I-74 at 19 th Street	No
	Shift mainline eastward or westward	No
C. I. Josephson House	Interchange variation M1 avoids the property with either alignment	Yes
Knights of Pythias Lodge Hall	Shift the mainline eastward or westward	No
Eagle Signal Building	Alignment F avoids the property	Yes
Davenport, Rock Island, and Northwestern Railroad Depot	Shift the mainline eastward or westward	No
Iowa-Illinois Memorial Bridge	Non-roadway improvement alternatives	No
McManus Park	The Kimberly Road underpass variation avoids the property	Yes
	Shift mainline eastward or westward	No
Iowana Milk Farms Company	Eliminate US 67 interchange	No
	Shift mainline eastward or westward	No

Measures to Minimize Harm

In addition to specific avoidance alternatives at each potentially affected property, minimization alternatives were considered when avoidance was not possible. The following discussion details the minimization actions considered. Where specific map diagrams are useful in understanding the minimization option, they are referenced. See Appendix 4(f)-3.

5.1 Minimization Measures for Specific Properties

5.1.1 Scottish Rite Cathedral

Use of the southeast portion of the Scottish Rite Cathedral property would be required for the redesign of the southbound I-74 entrance ramp at 19th Street. Placement of fill material would be necessary to accomplish the elevation transition between 19th Street and elevated I-74, which consequently requires either a retaining wall or embankment slope. A retaining wall has been proposed to minimize the impact that an embankment would cause. While an embankment would require the acquisition of permanent right of way from the Scottish Rite Cathedral, by using a retaining wall, it is likely that only a temporary easement would be needed during construction, thus avoiding a permanent use of the property. If a temporary easement is required, the appropriate correspondence will be undertaken with the Illinois SHPO and the owners of the cathedral in accordance with the FHWA Section 4(f) Policy Paper.

5.1.2 Knights of Pythias Lodge Hall

The Knights of Pythias Lodge Hall is directly impacted by mainline I-74 improvements (both by the E Alignment Alternative which impacts the northwest corner of the property and by the F Alignment Alternative, which impacts the entire property). As discussed in the previous section of this 4(f) document, impacts resulting from mainline improvements are unavoidable at this location. The possibility of minimizing impacts with the E Alignment Alternative, which impacts the northwest corner of the property, was considered. The proposed M2 interchange variation (loop type interchange) would result in unavoidable impacts to the site. Shifting the ramp would leave the building within the interchange infield, where access would be prohibited due to FHWA policy.

With the M1 interchange variation (split diamond type interchange), the options considered included changing the ramp divergence angle and alignment, thereby shifting the northbound entrance and southbound exit ramps east of the Knights of Pythias Lodge Hall. This would impact the Thomas/Lewis/Wilson House, a 4(f) resource, as well as adjacent commercial properties. Also, this option would introduce undesirable curvature to the improved I-74 ramps, causing potential safety issues. Therefore, this option is not being carried forward for further consideration because of its impacts and the fact that it does not meet purpose and need. See Page 1 of Appendix 4(f)-3.

5.1.3 Davenport, Rock Island, and Northwestern Railroad Depot

Impacts to the Depot building would result from the proposed River Drive ramp improvements. Minimization options were explored both for the E Alignment Alternative (where the proposed northbound entrance ramp impacts the Depot building) and for the F Alignment Alternative (where the southbound exit ramp impacts the Depot building). Options considered include increasing and decreasing the ramp divergence angle, thereby shifting the ramps away from the Depot building. It should be noted that because the ramp is adjacent to the proposed alignment, the ramp divergence angle couldn't be decreased further; it has already been minimized to the least footprint (impact) possible. If the ramp divergence angle were increased, the building would be situated between the mainline and exit ramp. Access to the building would have to be eliminated per the FHWA policy that prohibits access to the infield area of interchanges. See Page 4 in Appendix 4(f)-3. While this minimization option would avoid physically impacting the Depot building, lack of access would render it unusable. Also, the shift of the southbound exit ramp with the F Alignment Alternative would result in direct impacts to the Eagle Signal Building, a 4(f) resource, as well as the Kone elevator factory. Thus this option was not recommended for further consideration.

5.1.4 Iowa-Illinois Memorial Bridge

Minimization alternatives were defined to be those that may require a physical alteration to the existing bridges or which may have an impact on the setting or aesthetic qualities of the existing bridges, but which do not require the demolition of the existing structures.

The following options were considered for their potential to minimize the impact to the existing NRHP – eligible structure:

Re-Use Of The Existing Bridges For I-74 Traffic With Construction Of A New Structure Adjacent To The Existing Bridges

This option would consist of converting the existing structures to carry I-74 traffic in one direction with the construction of a new structure to carry I-74 in the other direction. Due to the potential impacts associated with alignment options to the west of the existing bridges, the new structure would need to be constructed to the east of the existing bridges.

Therefore, the existing bridges would be used for southbound traffic and the new structure would be used for northbound traffic. Due to the separation between the existing structures, a collector-distributor system would be employed to provide access to downtown Bettendorf and Moline. The western-most structure would provide access to the interchanges in Bettendorf and Moline and the eastern-most structure would carry through traffic.

A review of trip patterns along I-74 revealed that this alternative would not address the capacity need for the project. Likewise the continued use of the narrow, two-lane bridges would not address the travel reliability need. The narrow bridge decks, with their lack of shoulders, would not be improved. Routine maintenance operations and accidents would still require lane closures. This option would also retain the reverse curvature on the approaches and the four reverse curves on the Illinois approach. All of the issues were identified as needs in the purpose and need statement. As this alternative would not meet

these needs, it was not considered further. More discussion on this alternative can be found in Section 2.2 in the DEIS.

Construction Of A New Bridge On New Alignment For I-74 Traffic With Re-Use Of The Existing Bridges For Local Traffic

This option would involve the use of the existing bridges for local traffic only with the construction of a new bridge to carry through traffic on I-74. This option is unreasonable because a negligible amount of the traffic in the corridor that has both an origin and a destination in the downtown areas, making it impractical to convert and maintain the existing crossing for local traffic.

Construction Of A New Bridge On New Alignment For I-74 Traffic With Re-Use Of The Existing Bridges For Bus Or Rail Transit

Rail Transit. This option would involve the construction of a new bridge for I-74 traffic and convert one or both of the existing river bridges to carry rail transit. The option is unreasonable for several reasons:

- There is not an existing rail infrastructure in the area of the existing bridges capable of using the existing bridges for a crossing;
- There is an existing rail corridor downriver in the Quad Cities with a crossing of the Mississippi River;
- There is not currently any other rail transit in the Quad Cities; therefore, none of the other needed infrastructure are in place to support this option.

Bus Transit. The demand for bus transit could easily be accommodated on a new structure. The expected volume of bus crossings per day would not be of a magnitude sufficient to support the continued use and maintenance of one or both of the existing I-74 bridges. Additionally, at a meeting held with MetroLINK, that agency communicated it was unwilling to adopt jurisdiction over the existing bridge. See Section 5 of the DEIS for more information about this meeting.

Construction Of A New Bridge On New Alignment With Re-Use Of One Of The Existing Bridges For Pedestrian / Bicycle Traffic

This option is one of three possibilities for accommodating bicycle/pedestrian traffic in the corridor (See Section 2 of the DEIS for more information). This option would convert the Iowa-bound (historic) bridge to a bicycle / pedestrian path and place all I-74 traffic on a new structure. The Iowa DOT has estimated that a path in this location would meet the 25 trips-per-day criteria in Iowa Trails 2000. Both states have trail systems generally following along the river through the Quad Cities and would be accessible to the converted I-74 bridge.

If the bridge were to remain in place, it would affect the placement and design of the new structure. The Coast Guard has indicated that if an existing structure were to remain in place, it would affect the pier placement of the new structure, as the existing navigational opening would need to be maintained. This may constrain design and increase costs for the new I-74 bridge. Further, this option can only be implemented if there exists a commitment from a local public agency to assume jurisdiction, future liability, and financial

responsibility for the bridge. The Coast Guard would require the bridge's removal if it will not be utilized for a transportation use. Project staff have contacted involved local agencies (Cities of Bettendorf and Moline, Scott County, and Rock Island County), and each of these agencies have indicated that they do not have interest in assuming jurisdiction over the bridge and the responsibilities it entails. See Appendix 4(f)-5, Correspondence.

Additionally, there is potential for a new structure to have an aesthetic impact on the historic structure, if the historic structure were to be used for the bicycle / pedestrian crossing. If the SHPO determines that an aesthetic impact would, in fact, occur, recommendation on effect would be made and coordination on mitigation would ensue. Preliminary bridge design concepts have been developed to include options that would complement the existing structures.

This option remains under consideration.

Widening The Existing Structures To Accommodate Additional Lanes

The design of the existing structures does not allow for them to be widened. Were any such attempt made, it would require the dismantling of the existing structures and their complete reconstruction. This work would require the closure of I-74 through the project area for the entire construction period. For these reasons, this alternative does not meet the purpose and need and was not carried forward.

Iowa-Illinois Memorial Bridge Monument

As a contributing element of the bridge, and as its exact location is not considered critical to its historic status (it has previously been relocated), relocation of the Iowa-Illinois Memorial Bridge Monument from its current position in Bill Glynn Memorial Park has been considered acceptable. Coordination with the Iowa SHPO will be undertaken to determine where the monument might be relocated. Leach Park may represent a desirable relocation opportunity since it is next to the river and bridges.

5.1.5 Iowana Milk Farms Company

The proposed improvements to the northbound exit ramp at US 67 (Grant Street) would result in direct impacts to this property. Several minimization options were considered at this location. One option involves increasing the ramp divergence angle and shifting the ramp to east of the Iowana property to an intersection with Grant Street near 15th Street. See Page 4 in Appendix 4(f)-3. This would also require shifting the proposed northbound entrance ramp to the east to ensure smooth traffic flow through the interchange area. While this option may avoid direct impacts to the property, access to the property would be prohibited because it is within the area between the mainline and entrance ramp. FHWA prohibits access to the infield area of interchanges. Without access, there would still be a permanent transportation use of the property. Further, this option would result in impacts to the local roadway system, including possible roadway closures and / or relocations in addition to property and neighborhood impacts. For these reasons, it is not being carried forward for further consideration.

Another minimization option considered would provide a similar modification in ramp divergence angle and an easterly shift of the northbound exit and entrance ramps. However,

the northbound exit ramp would intersect relocated State Street via a loop ramp. In addition to the concerns noted with the prior option, this would result in undesirable ramp curvature and steep grades, as well as inadequate storage and taper rates. Therefore, this option would not meet the purpose and need of improving travel dependability and road geometry. Additionally, it would not provide the minimum railroad clearance height of 23 feet. See Page 5 in Appendix 4(f)-3.

It should be noted that multiple interchange concepts were considered in downtown Bettendorf, including use of a northbound exit loop ramp to Grant Street. However, due to the close proximity of the improved mainline I-74 roadway to the Iowa property, these concepts would not minimize impacts to the property. These options were not carried forward for further consideration.

5.1.6 McManus Park

If the Holmes Street underpass is selected, a retaining wall is being proposed along the McManus Park property line to avoid a permanent acquisition from the park. However, a temporary construction easement may still be required. If required, appropriate correspondence will be undertaken with the City of Bettendorf in accordance with the FHWA Section 4(f) Policy Paper. (See Table 4, *Potential Impacts to 4(f) Properties in Bettendorf*, and Appendix 4(f)-2, *Properties Potentially Impacted*). The retaining wall would be placed behind the sidewalk, which would be reconstructed to allow continued access to the park by pedestrians.

The grade separation caused by the retaining wall between the park and the sidewalk, while not requiring acquisition from the park, still constitutes a use because it not only reduces the pedestrian access but creates potential safety concerns due to the grade separation. This use can be minimized if the proposed structure depth could be reduced. Work is continuing to determine if the structural depth can be reduced based on further study of drainage and subsurface issues such as utilities and underlying bedrock.

5.2 Mitigation

Potential mitigation for unavoidable impacts will be developed and included with the Final 4(f) Statement, based on comments received during the circulation of this 4(f) document and coordination with the property owners and the appropriate state SHPO for each property. It is likely that these measures will include relocation of the Iowa-Illinois Memorial Bridge Monument to Leach Park. For impacted historic buildings, the proposed mitigation will potentially involve documenting and photographing the structures for historic archives.

5.3 Summary

Of the eight 4(f) properties (including the bridge) potentially affected by the proposed improvement, two properties were shown to be avoidable (the C. I. Josephson House and the Eagle Signal Building). Minimization measures were developed for the remaining properties. The measures to minimize impacts are summarized in Table 6, *Summary of Minimization Measures for Specific Properties*.

TABLE 6
Summary of Minimization Measures for Specific Properties

Property	Minimization Measure(s)	Carried Forward?
Scottish Rite Cathedral	Construct a retaining wall to avoid permanent use of Scottish Rite Cathedral property	Yes
Knights of Pythias Lodge Hall	All alternatives would impact the building directly Minimization of impact to the building was not possible	Not applicable
Davenport, Rock Island, and Northwestern Railroad Depot	Increase or decrease the ramp divergence angle	No
Iowa-Illinois Memorial Bridge and Monument	Re-use of the bridges for I-74 traffic with construction of a new structure adjacent to the existing bridges	No
	Construction of a new bridge on new alignment for I-74 traffic with re-use of the existing bridges for local traffic	No
	Construction of a new bridge on new alignment for I-74 traffic with re-use of the existing bridges for transit	No
	Construction of a new bridge on new alignment with re-use of one of the existing bridges for pedestrian / bicycle traffic	Yes
	Widen the existing bridges to accommodate additional lanes	No
	Relocate the monument to another position near the bridge	Yes
McManus Park	Construct a retaining wall to avoid the acquisition of a permanent easement (for Holmes Street underpass option)	Yes
	Reduce the structure depth of the underpass	Yes
Iowana Milk Farms Company	Increase or decrease the ramp divergence angle	No
	Adjust the ramp configuration	No

As can be seen from Table 6, *Summary of Minimization Measures for Specific Properties*, potential impacts to three 4(f) resources can be minimized. Impacts to the Scottish Rite Cathedral and McManus Park can be minimized through the use of retaining walls in addition to reducing the underpass structure depth. Bridge impacts can be minimized by choosing to preserve the historic structure for pedestrian and bicycle accommodations. These minimization efforts would work with each of the proposed build alternatives E or F.

SECTION 6

Coordination

As emphasized throughout this 4(f) document, early identification of properties listed on or eligible/potentially eligible for the National Register of Historic Places contributed to the development of alignment alternatives that impact the least number of historic properties and parks in the project corridor. Following is a description of the interagency and public coordination conducted to identify and determine the significance of historic properties and recreational properties/parks in the area and impacts to them. (See Appendix 4(f)-5, Correspondence, and Section 5 of the DEIS for further information regarding the discussions held at Interagency and Public Coordination meetings.)

6.1 Coordination with the SHPO and Agencies With Jurisdiction

Coordination with the State Historic Preservation Officer (SHPO) for both Iowa and Illinois occurred throughout the study process. The results of the historic and archaeological surveys were coordinated with the SHPO for each state to gain concurrence for the properties under their jurisdiction. These concurrence findings reported on the types and locations of NRHP eligible properties. Effect determinations will be sought during the next phase of project study but prior to the final 4(f) statement.

The Illinois SHPO was forwarded the historic structure report on October 7, 2002 and concurred with the findings on October 21, 2002. The Illinois archaeology report was sent to SHPO for review and concurrence was received on November 19, 2002. The Iowa archaeology report and the historic reports were sent to the Iowa SHPO on August 26, 2002 and September 9, 2002. The archaeology report received Iowa SHPO concurrence on September 25, 2002, while the historic structures report received concurrence by the stipulation of 30 days having passed without receiving a written objection.

Similarly, coordination was undertaken with the representatives of the cities to assess the importance and uses of the recreational properties under their jurisdiction. This was primarily accomplished through the I-74 Project Advisory Committee process. Summaries of these discussions are found in Section 6.2 of this 4(f) document.

Review of the Draft Environmental Impact Statement and Draft Section 4(f) Statement will continue formal coordination with the public officials having jurisdiction over these Section 4(f) properties and that coordination will be documented in the Final 4(f) Statement. Coordination will continue to include the following items:

- Discussion of significance and primary use of the 4(f) property,
- Impacts to the property,
- Avoidance alternatives, and
- Measures to minimize harm.

6.2 I-74 Project Advisory Committee Meetings

An Advisory Committee is assembled with key representatives of the transportation agencies (Iowa DOT, Illinois DOT and FHWA) and involved communities and counties (the cities of Davenport, Bettendorf, and Moline; Rock Island County, Illinois; and Scott County, Iowa) to provide continual opportunity for communication throughout the process. The Bi-State Regional Committee is also represented by an ex-officio member. Nine I-74 Project Advisory Committee Meetings took place between January 2001 and October 2003. At six of these meetings, the Section 4(f) properties in the project corridor were discussed.

During these meetings, much of the time was spent on the historic bridge discussion. In order for the historic bridge to remain in place, two conditions must be met. First, the bridge must have a transportation use. Through the development process, it was determined that bicycle accommodations were the only possible transportation use. Second, the bridge must be owned and maintained by a public agency. Illinois DOT and Iowa DOT would require a transfer of jurisdiction of the historic bridge; therefore, per Coast Guard, a local municipality or county must take ownership of the bridge. Coordination relating to the jurisdiction of the bridge can be found in Appendix 4(f)-5, Correspondence.

6.2.1 April 2001

The first meeting included a discussion of corridor features and constraints. As part of this discussion, it was determined that potentially historic structures and recreation features are present in the corridor and that they would be considered constraints as the alternatives process ensued.

6.2.2 June 2001

Among other topics, it was emphasized that consideration would be given to maintaining public recreational properties in the corridor as the alternatives process progressed. The option to re-use the existing bridge(s) for alternative modes of transportation was also discussed. Determining future jurisdiction of the bridge maintained for solely bicycle / pedestrian use would be difficult due to the excessive maintenance costs associated with the bridge.

6.2.3 March 2002

Findings of an early investigation of historic sites in the project corridor were presented. It was stated that the public would be involved throughout the development of the alternatives with regards to the potential impact of the alternatives on the historic properties.

6.2.4 June 2002 / November 2002

These meetings continued discussions on use options for the I-74 bridge, including funding options for maintenance of the bridge for bicycle / pedestrian accommodations. Following these meetings, letters were sent to the municipalities and counties asking if they would assume jurisdiction of the bridge in order to provide bicycle and pedestrian accommodations. The results of this correspondence can be found in Appendix 4(f)-5.

6.3 Other Coordination Activities

Providing information and receiving feedback is a key element of the study process. Through a structured program that provided numerous opportunities for input, the I-74 Iowa-Illinois Corridor Study obtains the broadest participation at all levels: the public, interested groups, agencies, and elected officials.

6.3.1 Agency Input

In June 2001, A Concurrence Point (NEPA/404 Merge) Meeting was held. The purpose of this meeting was to review the concurrence point process and determine lead agencies. A subsequent meeting was held in December 2001 to discuss the study alternatives and describe the associated impacts to the resource agencies in attendance (see Section 5 of the DEIS). Generally, the resource agencies were in agreement with the project purpose and need as well as the impacts associated with the alternatives. They did not provide comments that indicate impact of a particular 4(f) resource under their jurisdiction.

6.3.2 Public Input

Using a multitude of communication tools, the public had numerous avenues to become involved. Through approximately 25 meetings – including interested groups, two major public meetings, numerous advisory committee and resource agency meetings, newsletters, web site, and media – the people in the Quad Cities had opportunities to learn about the project as well as provide input into the study process. Through this outreach program, the study team gained a thorough understanding of the transportation issues facing the Quad Cities' residents.

Many of the comments received during the Draft EIS study emphasized a frustration with growing congestion and safety concerns along the I-74 corridor – reflecting the need for major improvements. This study focused the transportation discussion on the major problems and potential solutions. While more information about the public meetings can be found in the *Coordination* section of the DEIS (Section 5), the following meeting summaries document the input received regarding the 4(f) properties, in particular the bridge.

6.3.3 Public Information Meeting #1 (July 2001) & #2 (July 2002)

During the first public meeting, the future of the bridge was presented at this meeting and focused on the fact that re-use of the existing bridges for other travel purposes, such as a new local roadway connection, transit corridor, or pedestrian/bicycle paths will be considered, provided that the crossing would serve a transportation use and that a local agency would have interest in assuming jurisdiction and responsibility for future maintenance of the existing bridges. The public expressed concern over the future of the historic bridge. However, it was explained that if there were no local interest in assuming jurisdiction of the bridges, the existing bridges would be removed.

At the second public meeting, comments continued to be solicited on use options for the existing Mississippi River bridge(s). Concern regarding the plans for existing and future Mississippi River crossings was again expressed at this public information meeting. It was explained that jurisdiction over the existing bridge(s) for non-transportation use continues

to be sought. Support for bike/pedestrian accommodations was again represented in citizen comments.

As a result, the bicycle / pedestrian accommodations remain under consideration in the designs of proposed build alternatives. Sections 4 and 5 of this 4(f) statement include a discussion on what alternatives are reasonable depending on the communities' interest in adopting jurisdiction over the eligible bridge.

6.3.4 Small Group Meetings with Save the Memorial Bridge Committee (January & April 2002)

At the January meeting, the Save the Memorial Bridge Committee emphasized concern over the prospects of retaining the existing bridges. As such, the Committee emphasized the need for a local entity to take jurisdiction over the bridge. The Committee also suggested a re-use option (re-using existing bridges for one direction of I-74 traffic) for the existing bridges. This option was subsequently considered. In the subsequent April meeting, the Committee expressed concern that local municipalities were not seriously considering adopting jurisdiction of the bridge. Coordination with the local communities has been ongoing and utilization of the existing bridges is still under consideration (See Appendix 4(f) – 5 for more information about the local communities willingness to accept jurisdiction of the bridge.

6.3.5 Bridge Workshop

In March 2002, a bridge workshop was held to address the status of the bridge. Elected officials, city/county employees, historians, transit providers, and interest group members attended a bridge workshop to obtain information on the alternatives for the bridges as well as provide input on goals and concerns regarding the existing and proposed bridges.

6.4 Continued Coordination

This Draft 4(f) Statement will be made available to the public and resource/regulatory agencies as part of the Draft Environmental Impact Statement public availability process, and copies will be made available to local units of government for review and comment. A Public Hearing will also be held to discuss the proposed action with interested parties. Responses relative to Section 4(f) from reviewing agencies, local governments and interested parties will be included in the Final Section 4(f) Statement prepared for this project. Comment letters and correspondence received specific to the 4(f) from the agency coordination process are included in Appendix 4(f)-5. Overall project correspondence letters can be found in the DEIS Appendix C.

SECTION 7

Summary and Disposition of the Draft Section 4(f) Statement

7.1 Summary

This Draft Section 4(f) Statement describes a proposed capacity improvement project within the existing I-74 corridor between Moline, Illinois and Davenport, Iowa. The proposed improvements will consider additional capacity on I-74, an improved Mississippi River Crossing, improvements to the existing service interchanges, enhancements to the connecting arterial roadway system, and opportunities for improved transit and intermodal connections.

These improvements are being carried out in cooperation with both FHWA and the Iowa and Illinois Departments of Transportation. Further, the proposed action is consistent with local and regional transportation planning goals, including the Long Range Transportation Plan and the Quad Cities Mississippi River Crossing Major Investment Study (December 1998) conducted by the Iowa Department of Transportation and the Illinois Department of Transportation. The outcome of this study was a recommendation for a three-prong strategy to improve Mississippi River crossings in the Quad Cities, including improving the I-74 Mississippi River Bridge and associated corridor.

This 4(f) document establishes applicability of 49 U.S.C. 303, commonly referred to as Section 4(f) to certain resources within the corridor under study. These properties can be found in Table 7, *4(f) Properties Potentially Impacted*.

TABLE 7
4(f) Properties Potentially Impacted

Illinois Properties	Iowa Properties
Scottish Rite Cathedral	Iowa-Illinois Memorial Bridge and Monument
C. Ivar Josephson House	McManus Park
Knights of Pythias Lodge Hall	Iowana Milk Farms Company
Eagle Signal Building	
Davenport, Rock Island, and Northwestern Railroad Depot	

Additionally, this 4(f) document provides a record of coordination efforts with officials having jurisdiction over the resources cited above, discusses alternative locations that avoid the use of the protected resources, and identifies measures that will minimize/mitigate harm to these resources.

The purpose and need for the proposed action has been expressed in terms of an action that will improve capacity, travel reliability, and safety within the existing I-74 corridor. I-74 is an established transportation corridor within the Bi-State Metropolitan area in the Quad Cities, and as such is a critical surface transportation link. Section 4(f) properties were identified early in the project development process. By identifying these properties early, avoidance of 4(f) properties was considered in the alternatives development process. The proposed alternatives were developed to avoid as many impacts as possible while still meeting the purpose and need. Of the 20 4(f) properties in or near the corridor, 12 were avoided through alternative development. Other alternatives were considered, including diversion of traffic to other interstate facilities by revising interstate signing, diversion of traffic to the local road system, transit and transportation system management strategies, and alternative river crossing location options. However, these alternatives were determined to not meet the project purpose and need, and were not carried forward for detailed evaluation.

For each of the eight potentially impacted properties, a series of specific avoidance alternatives was investigated (Table 5, *Summary of Avoidance Alternatives for Specific Properties*). Of the avoidance alternatives investigated for the eight specific 4(f) properties, three alternatives were carried forward for further consideration and are summarized as follows:

- C.I. Josephson House – the interchange variation M1 avoids the property with either alignment E or F
- Eagle Signal Building – Alignment F avoids the property
- McManus Park – the Kimberly Road Underpass variation avoids the property

Those alternatives that were not carried forward were typically not able to meet the purpose and need or were not technically viable. For the five remaining 4(f) properties that could not be avoided, suggested minimization measures have been carried forward for further consideration (Table 6, *Summary of Minimization Measures for Specific Properties*). These measures are summarized as follows:

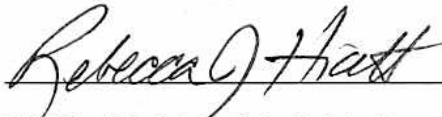
- Scottish Rite Cathedral – Construct a retaining wall to avoid permanent use of the Cathedral property.
- Iowa-Illinois Memorial Bridge and Monument – Construct a new bridge on new alignment within the corridor with re-use of one of the existing bridges for pedestrian/bicycle traffic and relocate the monument to another position near the bridge.

McManus Park – (1) Construct a retaining wall to avoid the acquisition of a permanent easement (for Holmes Street Underpass variation) and (2) reduce the structure depth of the underpass.

The above minimization efforts could be used with either of the proposed alternatives E or F. All of the other minimization efforts that were not carried forward were either not able to meet the purpose and need or were not technically viable for construction (Table 6, *Summary of Minimization Measures for Specific Properties*).

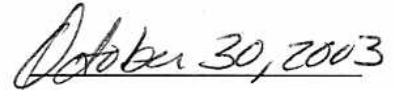
7.2 Disposition

Based on the discussion above, and considering the support regarding planned improvements either from public, resource/regulatory agencies or agencies with jurisdiction over the protected resources cited, it is the intent of the FHWA and Iowa and Illinois Departments of Transportation to proceed with the project development within the existing I-74 corridor. A public hearing will be held to discuss this proposed action with the public, and copies of the Draft Environmental Impact Statement / Draft Section 4(f) Statement will be made available to the public and resource/regulatory agencies for review and comment. A 45-day review and comment period will be provided for the public and resource agencies review. Following the review period, it is anticipated that a Final Section 4(f) Statement will be prepared and circulated with the Final EIS for this project. Comments received on the draft documents and during the public availability period will be presented in the final documents.



For the Division Administrator

Federal Highway Administration



Date